

Listing of the Claims:

The following is a complete listing of all the claims in the application, with an indication of the status of each:

- 1 Claims 1-3 (Canceled).
- 1 Claim 4. (Currently Amended) An edge correction apparatus for a
2 digital video camera, comprising:
3 a horizontal edge signal generator and a vertical edge signal
4 generator for respectively generating horizontal and vertical edge
5 correction signals in horizontal and vertical directions of a sensed image
6 obtained via an image sensing element of a digital video camera;
7 a horizontal edge signal gain controller and a vertical edge signal
8 gain controller for controlling gains of the horizontal and vertical edge
9 correction signals respectively from said horizontal edge signal generator
10 and said vertical edge signal generator;
11 an adder for adding the horizontal and vertical edge correction
12 signals whose gains are controlled by said horizontal edge signal gain
13 controller and said vertical edge signal gain controller;
14 a slice processor for adding, to an image processing signal of the
15 digital video camera, an edge correction signal obtained by performing
16 slice processing for and edge signal output from said adder; and
17 a vertical edge component suppression position detector for causing
18 said vertical edge signal gain controller to execute gain control of the
19 vertical edge correction signal in accordance with a horizontal difference
20 signal output from said horizontal edge signal generator,
21 wherein the horizontal difference signal is a signal corresponding
22 to a pixel value less a weighted sum of a luminance difference between
23 horizontally adjacent pixels on opposite horizontal sides of said pixel that
24 is output from said horizontal edge signal generator and a difference
25 between digital video camera CCD output signals vertically adjacent on
26 opposite vertical sides of said pixel, and

27 wherein gain control of the vertical edge correction signal by said
28 vertical edge signal gain controller is executed when the luminance
29 difference between horizontally adjacent pixels is not less than a set
30 threshold, and outputs of vertically adjacent digital video camera CCD
31 output signals are not more than a set threshold.

1 Claim 5. (Currently Amended) An edge correction apparatus for a
2 digital video camera, comprising:
3 a horizontal edge signal generator and a vertical edge signal
4 generator for respectively generating horizontal and vertical edge
5 correction signals in horizontal and vertical directions of a sensed image
6 obtained via an image sensing element of a digital video camera;
7 a horizontal edge signal gain controller and a vertical edge signal
8 gain controller for controlling gains of the horizontal and vertical edge
9 correction signals respectively from said horizontal edge signal generator
10 and said vertical edge signal generator;
11 an adder for adding the horizontal and vertical edge correction
12 signals whose gains are controlled by said horizontal edge signal gain
13 controller and said vertical edge signal gain controller;
14 a slice processor for adding, to an image processing signal of the
15 digital video camera, an edge correction signal obtained by performing
16 slice processing for and edge signal output from said adder; and
17 a vertical edge component suppression position detector for causing
18 said vertical edge signal gain controller to execute gain control of the
19 vertical edge correction signal in accordance with a horizontal difference
20 signal output from said horizontal edge signal generator,
21 wherein the horizontal difference signal is a signal corresponding
22 to a pixel value less a weighted sum of an output difference between
23 horizontally adjacent pixels on opposite horizontal sides of said pixel that
24 is output from said horizontal edge signal generator and a difference
25 between digital video camera CCD output signals vertically adjacent on
26 opposite vertical sides of said pixel, and

27 wherein gain control of the vertical edge correction signal by said
28 vertical edge signal gain controller is executed when the output difference
29 in green signal between horizontally adjacent pixels is not less than a set
30 threshold, and the difference between the vertically adjacent digital video
31 camera CCD output signals is not more than the set threshold.

1 Claim 6. (Previously Presented) An edge correction apparatus for a
2 digital video camera, comprising:
3 a horizontal edge signal generator and a vertical edge signal
4 generator for respectively generating horizontal and vertical edge
5 correction signals in horizontal and vertical directions of a sensed image
6 obtained via an image sensing element of a digital video camera;
7 a horizontal edge signal gain controller and a vertical edge signal
8 gain controller for controlling gains of the horizontal and vertical edge
9 correction signals respectively from said horizontal edge signal generator
10 and said vertical edge signal generator;
11 an adder for adding the horizontal and vertical edge correction
12 signals whose gains are controlled by said horizontal edge signal gain
13 controller and said vertical edge signal gain controller;
14 a slice processor for adding, to an image processing signal of the
15 digital video camera, an edge correction signal obtained by performing
16 slice processing for and edge signal output from said adder; and
17 a vertical edge component suppression position detector for causing
18 said vertical edge signal gain controller to execute gain control of the
19 vertical edge correction signal in accordance with a horizontal difference
20 signal output from said horizontal edge signal generator,
21 wherein gain control of the vertical edge correction signal by said
22 vertical edge signal gain controller is executed when an amplitude of the
23 horizontal difference signal exceeds a set threshold which is greater than
24 zero.

1 Claim 7. (Previously Presented) An edge correction apparatus for a

2 digital video camera, comprising:
3 a horizontal edge signal generator and a vertical edge signal
4 generator for respectively generating horizontal and vertical edge
5 correction signals in horizontal and vertical directions of a sensed image
6 obtained via an image sensing element of a digital video camera;
7 a horizontal edge signal gain controller and a vertical edge signal
8 gain controller for controlling gains of the horizontal and vertical edge
9 correction signals respectively from said horizontal edge signal generator
10 and said vertical edge signal generator;
11 an adder for adding the horizontal and vertical edge correction
12 signals whose gains are controlled by said horizontal edge signal gain
13 controller and said vertical edge signal gain controller;
14 a slice processor for adding, to an image processing signal of the
15 digital video camera, an edge correction signal obtained by performing
16 slice processing for and edge signal output from said adder; and
17 a vertical edge component suppression position detector for causing
18 said vertical edge signal gain controller to execute gain control of the
19 vertical edge correction signal in accordance with a horizontal difference
20 signal output from said horizontal edge signal generator, wherein the
21 horizontal difference signal is a signal corresponding to a luminance
22 difference between horizontally adjacent pixels that is output from said
23 horizontal edge signal generator and,
24 wherein gain control of the vertical edge correction signal by said
25 vertical edge signal gain controller is executed when the luminance
26 difference between horizontally adjacent pixels is not less than a set
27 threshold which is greater than zero.

1 Claim 8. (Previously Presented) An edge correction apparatus for a
2 digital video camera, comprising:
3 a horizontal edge signal generator and a vertical edge signal
4 generator for respectively generating horizontal and vertical edge
5 correction signals in horizontal and vertical directions of a sensed image

6 obtained via an image sensing element of a digital video camera;
7 a horizontal edge signal gain controller and a vertical edge signal
8 gain controller for controlling gains of the horizontal and vertical edge
9 correction signals respectively from said horizontal edge signal generator
10 and said vertical edge signal generator;
11 an adder for adding the horizontal and vertical edge correction
12 signals whose gains are controlled by said horizontal edge signal gain
13 controller and said vertical edge signal gain controller;
14 a slice processor for adding, to an image processing signal of the
15 digital video camera, an edge correction signal obtained by performing
16 slice processing for and edge signal output from said adder; and
17 a vertical edge component suppression position detector for causing
18 said vertical edge signal gain controller to execute gain control of the
19 vertical edge correction signal in accordance with a horizontal difference
20 signal output from said horizontal edge signal generator, wherein the
21 horizontal difference signal is a signal corresponding to an output
22 difference in green signal between horizontally adjacent pixels that is
23 output from said horizontal edge signal generator and,
24 wherein gain control of the vertical edge correction signal by said
25 vertical edge signal gain controller is executed when the output difference
26 in green signal between horizontally adjacent pixels is not less than a set
27 threshold which is greater than zero.

1 Claims 9-10. Canceled